

REMARKS

Claims 1 – 55 and 70 – 81 are pending in this application. The Examiner objected to claim 38 because the claim depended on itself. Claim 38 has been amended to depend on claim 37.

Claim Rejections – 35 USC §102

Claims 1 – 15, 17 – 34, 36 – 54, and 70 – 81 have been rejected under 35 USC 102(e) as being anticipated by Hsu et al. (US Patent 6,506,643). This rejection is respectfully traversed in part.

Claim 1 has been amended to include the limitation of claim 2, and claim 2 has been canceled. Claim 1 now requires that the ferroelectric thin film have a thickness not exceeding 80 nm. Claim 72 has been amended to include the limitation that the capacitor laminate has a thickness not exceeding 250 nm. The present application stresses that the thicknesses claimed are extremely important to the realization of a workable three-dimensional capacitor because these thicknesses permit a reduced thermal budget and prevent damage to the integrated circuit. See page 4, line 14, through page 5, line 10; page 8, lines 4 – 19; page 16, line 23, through page 17, line 26; and many other places in the application. Hsu et al. states that the bottom electrode and the top electrode have a thickness of approximately 0.1 to 0.2 microns, and the ferroelectric thin film has a thickness of approximately 0.1 to 0.4 microns. See col. 4, lines 54 – 57. Hsu et al. does not recognize the requirement for much thinner films for any reason, and in particular to reduce thermal damage. Therefore, the amended claims 1 and 72 are patentable over Hsu et al. Claims 3 – 15, 17 – 34, 36 – 54, and 73 – 81 depend on either claim 1 or claim 72, and are therefore also patentable at least for that reason. *In re Fine*, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988) at headnote 4.

The other independent claim, claim 70, along with claim 71, has been canceled.

Claims 16, 35, and 55 have been objected to as being dependent upon a rejected base claim. Claims 1, 17, and 36, the independent claims on which claims 16, 35, and 55 depend, respectively, as argued above are allowable; therefore, claims 16, 35, and 55 are allowable without rewriting. A new claim 82 has been added which includes all the

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limitations of the original claims 1 and 16, which has been indicated to be allowable.

In view of the foregoing amendments, it is believed that the application, including claims 1, 3 – 55 and 72 – 82, is in condition for allowance, and favorable action is respectfully requested.

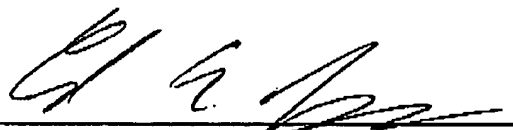
It is believed no fees are due. If any fee is seen to be required, please charge Deposit Account No. 50-1848.

Respectfully submitted,
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7/19/05

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